

# Managing and Uncertain Future & Integrated Data & Analysis

Content Review for Update 2013





FLOODS



DECLINING ECOSYSTEMS

# Managing an Uncertain Future

Risk, Uncertainty, and Sustainability



DROUGHT



ENERGY  
CRISIS

# About this Chapter

## Managing and Uncertain Future

- 💧 Planning Approach
- 💧 Recognizing and Reducing Uncertainty
- 💧 Assessing Risk
- 💧 Managing for Sustainability
- 💧 Planning for an Uncertain Future



# Planning Approach

This section will be a light update from Update 2009

- 💧 Overview
- 💧 Traditional Planning Approach—The Past is a Model for the Future
- 💧 New Planning Approach—Anticipate Change





# Recognizing and Reducing Uncertainty

This section will be a light update from Update 2009

- 💧 Uncertainty due to random events like earthquakes and floods
- 💧 Uncertainty due to lack of knowledge or scientific information



# Assessing Risk

This section will be a light  
update from Update 2009

- 💧 Accounting for Risk
- 💧 Risk Assessment Example



# Managing for Sustainability

- 💧 What is Sustainability?
- 💧 Sustainability Indicators
- 💧 Water Footprint as an index of sustainability
- 💧 Examples - Managing for Sustainability
- 💧 Water Sustainability Decision Support Tool



# Planning for an Uncertain Future

- 💧 Scenario Factors Affecting Future Water Management
- 💧 Statewide and Hydrologic Region 2050 Water Demands
- 💧 Evaluating Resource Management Strategies and Supporting Decisions
- 💧 Water Management Vulnerabilities





# Discussion

- 💧 What important concepts about risk, uncertainty, and sustainability would you like *Managing an Uncertain Future* to capture?
- 💧 What information do you need to describe sustainable management of water resources and aid in decision making?
- 💧 What concepts related to water management vulnerabilities are important for the Water Plan to capture?





# Integrated Data & Analysis

## Informed and Transparent Decision Making



# About this Chapter

## Integrated Data & Analysis

- 💧 Purpose and motivation
- 💧 Informing the Water Plan Policy Setting With Quality Information and Analysis
- 💧 Developing New Technology
- 💧 Objectives for Informed and Transparent Decision Making
- 💧 Prioritizing Action on Informed and Transparent Decision Making

*Update 2013*

*California Water Plan*





# Purpose and motivation

- 💧 Describes an analytical framework to support sound and effective water policy decisions
- 💧 Promotes the use of collaborative processes and technical enhancements consistent with the Water Plan goals and objectives
- 💧 Supports decision making





# Informing the Water Plan Policy Setting with Quality Information and Analysis

- 💧 Provides vision of how collaborative process, analytical tools, and information can be integrated for effective decision making
- 💧 Provides a list of policy relevant questions from Update 2005 that guide technical analysis
- 💧 Describes what the Water Plan can learn from related integration efforts



# Developing New Technology

- 💧 Summarizes information from the Water Technology caucus about new technologies that may improve the efficacy of information and analysis for Integrated Water Management



# Objectives for Informed and Transparent Decision Making

## 💧 Process enhancements

- Shared Vision Planning

## 💧 Analytical tool enhancements

- Establish Modeling Protocols and Standards
- Develop Common Schematics of the Water Management System
- Develop a Common Conceptual Understanding of the Water Management System

## 💧 Information and data enhancements

- Developing a Strategic Plan for Managing California's Water and Environmental Information
- Integrating Urban Water Management Plans on a Regional and Statewide Scale
- Developing the Water Planning Information Exchange

*Update 2013*

*California Water Plan*



# Prioritizing Action

- 💧 Section will describe recommendations and responsibilities for implementing the objectives





# Discussion

- 💧 What important concepts about *Integrated Data & Analysis* would you like this Chapter to capture?
- 💧 What sources of information or related efforts on integrated analysis should the Water Plan consider?
- 💧 What significant policy questions are missing from the 28 we presented?
- 💧 What specific information are you lacking to make effective decisions?



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